

MAR 2 1964

# Dozen New 2,000 M.P.H. Jets Flying, Russell Says

## Titanium Plane Is a Whopping U. S. Victory

Washington, March 1—The United States, in one dramatic move, has scored a major victory in the race with Britain and France to develop and sell a supersonic air liner.

That is the chief significance—at least to civilian aviation—in President Johnson's announcement Saturday that the United States has developed a 2,000-mile-an-hour interceptor.

The United States has not one but several already under flight tests and the planes, known as the A-11, are titanium-coated.

### "11 or 12" Flying

Chairman Richard B. Russell [D., Ga.] of the Senate armed services committee said today the United States already is "flying" 11 or 12 of the planes. He said on a television program that some are ready for air force use but have not yet been turned over to the service.

The President will issue tomorrow the not-so-secret "Black report" on the financing and management of the United States supersonic transport program.

The report, which has been under White House wraps since it was submitted last December, is known to be sharply critical of this country's efforts. It says the United States should proceed slowly and cautiously and not try to beat the British and French in producing such a plane—advice which the A-11 disclosure appears to have shot down.

The report was a joint undertaking of the government and aircraft industry.

### Might Cut Down Missiles

In issuing his announcement at his first live televised news conference, the President said the A-11 plane was being tested to determine the military value of the craft as a long-range interceptor. In a further military role, the plane might be used for reconnaissance or to shoot down missiles.

But the A-11, billed by Johnson as the fastest jet in the world, has an equally big future in the field of civilian transportation.

The President said the plane's development was made possible by "major advances in aircraft technology of great significance to both military and commercial application."

Then he added this statement:

"One of the most important technological achievements in this [A-11] project has been the mastery of the metallurgy and fabrication of titanium metal which is required for the high temperatures experienced by aircraft traveling at more than three times the speed of sound."

### British Take Dim View

The British-French supersonic transport known as the



Sen. Richard Russell

Concorde; is being built of conventional aluminum alloys. This limits its top speed to mach 2.2, or about 1,450 m. p. h. But the Concorde's chief selling point has been the argument that an aluminum European supersonic transport will be available for actual air line service long before a titanium transport.

George Edwards, managing director of the British Aircraft corporation, recently needed the United States supersonic program with this observation about a titanium air liner:

"We know we can make it

materials using established methods, and existing resources of skill, machinery and manpower. The Americans may prefer to spend three to five times as much in building steel or titanium air liners with only marginal improvement in block speed over a mach 2.2 aircraft. This is their affair. . . . We believe that the aerodynamic step from subsonic to supersonic travel is enough on its own without adding other steps involving new materials, new production techniques, and all the other things which stem from flying around with an airframe at over 300 degrees centigrade."

### Price Brought Down

That criticism has now been rendered obsolete, for the A-11 disclosure shows that:

1. A titanium plane can be built using conventional assembly line methods, thanks to the breakthrough in fabrication techniques; this should bring the cost of a United States supersonic air liner down to within a competitive range of the 10-million dollar Concorde.

2. Sustained flights at Mach 3 are feasible and safe. A-11 test flight indicate that many technical problems of supersonic flight are being licked well in advance of commercial application.

The so-called Black report, prepared by the former world bank president, Eugene R.

Black, and financier Stanley de J. Osborne, urges sweeping changes in the United States project.

### Black Report Outmoded

It says the federal government should pay 90 per cent of the plane's development and tooling costs instead of the 75 per cent proposed by Johnson himself, when as Vice President he headed a top-level cabinet committee that recommended an all-out effort.

The Black report also urges that the program be taken away from the federal aviation agency and put into the hands of a new independent agency. It suggests a "go slow" policy on the project because of the technical difficulties involved.

The Black report almost as effectively as it has. . . . The Concorde project. . . . before the metallurgical breakthrough was disclosed, the FAA had received assembly line reservations for 72 United States supersonic transports from 13 airlines and an aircraft leasing firm. This compares with 37 advance orders for the Concorde. The FAA customers include nine foreign air lines, and the delivery deposits total 7.2 million dollars.